

## STAFF REPORT

**DATE:** September 16, 2020  
**TO:** Utilities Commission  
**FROM:** Jason Best, IS Director  
**SUBJECT:** Agreement with Astound/Wave LLC to Improve Fiber-Optic Infrastructure

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### **Recommendation**

Provide feedback to staff for the City Council on the proposed agreement with Astound/Wave LLC to improve fiber-optic infrastructure.

### **Fiscal Impact**

The proposed agreement is to provide for the continuance of a necessary service some city and county buildings, provide new service to the Waste Water Treatment Plant (WWTP), the elevated tank and a number of well sites. Until 2018 the service to buildings within the city was provided at no cost. Now the City pays an annual cost of \$77,000 and of this amount, the County reimburses the City \$24,000.

With this agreement in place, the City and County will be able to get internal network between buildings for free and internet service from Wave at a reduced cost. For example, currently the City pays AT&T over \$1,700 a month for a one gigabyte internet connection to City Hall. The same service from Wave will be approximately \$1,400. The current connection to the WWTP is a 10-year-old, 100-megabyte point to point wireless from the Police tower on 5<sup>th</sup> street. This unit is end of life and needs to be replaced at a cost estimated of about \$100,000. With this agreement, the city will have a 10-gigabyte connection to the plant for free and a one gigabyte internet backup at reduced cost.

### **Background and Analysis**

The City of Davis has relied on two fiber-optic network deployments to run City, County, and School District computer/phone networks. The City owns and maintains one of the deployments, which is unaffected by this item. The other deployment was known as the Institutional Network (I-Net) which was provided to the City of Davis as part of the Cable Television Franchise Agreement. This agreement was locally negotiated with Comcast, and updated and renewed in 2005, and expired in October of 2018. Cable TV franchising responsibility migrated to the State of California in 2006, and is now managed by the California Public Utilities Commission (CPUC). This change created uncertainty about how the City's needs would best be met following the expiration of the local agreement with Comcast. The City of Davis, County of Yolo, and Davis Joint Unified School District (DJUSD) have had use of the I-Net at no cost until recently.

In anticipation of the end of the local cable franchise agreement with Comcast, staff met with County and School District partners to discuss future options for the I-Net. Many months of

discussions took place between the City and Comcast to explore the potential for a new agreement to cover the remaining service needs. Unfortunately, discussions with Comcast were not fruitful. Continuing use of the I-Net is incurring significant new ongoing costs, starting out at \$77,000 per year, with indications that pricing would increase going forward.

As a result, staff worked to increase the City's inventory of infrastructure to ensure the ongoing reliability of network services, and supported the County of Yolo and Davis Joint Unified School District in actions these organizations undertook to ensure their ability to have uninterrupted service. DJUSD opted to utilize a special education rate specific to school districts to contract with another provider for service to the school sites across town, so they are no longer in need of the same services the City and County require.

During this time, Yolo County, while working to replace an aging network infrastructure serving County facilities, entered in to an agreement with Astound Broadband LLC. This agreement requires cooperation from the City of Davis, while providing the benefit to the City of access to infrastructure to serve the facilities at the Waste Water Treatment Plant.

During the process of working with Yolo County and Astound Broadband LLC, conversations took place focused on the needs of the City and the potential to provide mutual benefits via a public/private partnership to share existing infrastructure and develop new infrastructure for the fiber-optic network that would serve the City in place of the previously used I-Net.

Ultimately, The City Council passed a resolution on July 30<sup>th</sup> 2019 to proceed with the project. While staff and legal team were doing the necessary research on this project, the business landscape and executive management changed at Astound/Wave and they elected not to go forward.

As a result of the COVID crisis and City operations needing to be moved out of City buildings, the City needed upgraded internet speed. Staff requested quotes from several vendors, selecting AT&T because their CalNet price was lower than any other bid. This process revived the fiber/conduit swap agreement with Wave.

This new proposed agreement is scaled down from last year's agreement. It requires Astound to bring fiber-optic cable to supply high-speed network into the City of Davis using existing City-owned conduit. In addition, Astound will build a fiber-optic network to specified City buildings and well/pump sites, Yolo County buildings, and a connection to UC Davis. A total of 14 public sites will be connected by Astound and provided with 6 pairs of fiber for the City's (or County's) sole use.

This new network will be available to the City of Davis free of charge and will connect additional sites that were not part of the I-Net. The estimated cost of this investment by Astound is approximately \$1.1 million. The City, County, and schools (both DJUSD and UCD) will also have access to low internet pricing from Wave. The attached map shows the location of the proposed project route. Access by Astound to any and all locations not currently noted on the maps would be subject to future agreements and are not allowed by this agreement.

Although the City retains control of the conduit, Astound will be responsible to maintain the entire network.

In exchange for assuming the entire cost of new buildout, the City would allow Astound Broadband LLC to place their fiber in City conduit throughout the area noted on the map for commercial uses. The fiber strands used by the City and Astound will be secure and not interconnected, and each party will retain exclusive rights to those fibers for 30 years. Astound will have exclusive access to the other fibers it installs, although the City may lease to other service providers any space that remains for additional fiber in the conduit subject to this agreement, with the potential to generate revenue for the City. In addition, the City will continue to retain separate parallel empty conduit along much of the City conduit route provided to Astound.

It is important to note that Astound Broadband LLC, or any other entity, could, through customary measures such as requests for encroachment permits, build out infrastructure that would provide similar capacity for commercial uses without any benefit to the City.

Only locations covered in this agreement are subject to these terms. If the City adds conduit to a new location, Astound and the City must negotiate if Astound wants to use the conduit and/or if the City wants a new connection.

Having a reliable high-speed fiber optic network to the WWTP, well sites and storage tank would allow the City to monitor and remotely control the City's water resources quickly and effectively. With the new SCADA (Supervisory Control and Data System) at the WWTP, and the City's upgrading the freshwater system to match, enhanced digital control of sites will allow for better monitoring and more efficient use of staff time. Real time adjustments can be made if necessary. This network will also provide other City and County buildings with high-speed access to data both within the City network and beyond. Finally, this project will complete a self-healing network (a self-healing loop provides redundancy in the case that one line fails) between UC Davis, Yolo County and the City of Davis for public safety services.

## **Attachments**

1. Agreement Map

# Astound/Davis Agreement

## Proposed Fiber Route



**Legend**

- City Conduit
- County Conduit
- New Underground
- New Aboveground